



The Cup City Trophy Heist

Grade 5 math · Fractions of a number, Order of operations, Multiplication, Rounding, Division · Reading level grades 5-6

Detective: _____ Date: _____

The golden championship trophy has vanished from the display case just hours before the big game! The team manager discovered a messy locker room and a trail of soccer cleats leading out to the pitch. We must analyze the clues left behind to catch the culprit before kickoff.

1. Solve each math problem. The answer is a number, and the letter beside it is what that number stands for.
2. In the clue boxes, write that letter in every box showing the same number, then read the secret clue.
3. Use each clue to cross suspects off the list. The one suspect left at the end is the culprit!

My answer: the the rogue striker is _____

Possible suspects

Cross off a row as each clue rules it out. The one left at the end is the culprit.

NAME	SIGNATURE KICK	LUCKY GEAR	DOMINANT FOOT	HEADBAND COLOR	PITCH HAZARD
Alisson Becker	Power Volley	Red Wristband	Right Footed	Orange Headband	Muddy Grass
Antoine Griezmann	Knuckleball	Neon Gloves	Right Footed	Blue Headband	Muddy Grass
Cristiano Ronaldo	Bicycle Kick	Stripes Socks	Left Footed	Orange Headband	Muddy Grass
Phil Foden	Knuckleball	Star Shinguards	Right Footed	Orange Headband	Windy Air
Rodri	Header Blast	Neon Gloves	Left Footed	Orange Headband	Wet Turf
Harry Kane	Power Volley	Red Wristband	Right Footed	Green Headband	Windy Air
Erling Haaland	Header Blast	Red Wristband	Left Footed	Orange Headband	Wet Turf
Robert Lewandowski	Knuckleball	Golden Cleats	Left Footed	Blue Headband	Wet Turf
Enzo Fernandez	Header Blast	Neon Gloves	Right Footed	Orange Headband	Muddy Grass
Kevin De Bruyne	Power Volley	Star Shinguards	Right Footed	Blue Headband	Muddy Grass
Luka Modric	Curving Corner	Red Wristband	Left Footed	Orange Headband	Windy Air
Bruno Fernandes	Curving Corner	Red Wristband	Left Footed	Orange Headband	Muddy Grass
Lionel Messi	Knuckleball	Stripes Socks	Right Footed	Blue Headband	Muddy Grass
Son Heung Min	Header Blast	Neon Gloves	Left Footed	Orange Headband	Windy Air
Luis Diaz	Knuckleball	Stripes Socks	Right Footed	Orange Headband	Muddy Grass
Bukayo Saka	Curving Corner	Neon Gloves	Right Footed	Orange Headband	Windy Air
Declan Rice	Power Volley	Star Shinguards	Left Footed	Green Headband	Windy Air
Kylian Mbappe	Knuckleball	Golden Cleats	Right Footed	Orange Headband	Muddy Grass
Jack Grealish	Curving Corner	Golden Cleats	Left Footed	Blue Headband	Wet Turf
Virgil van Dijk	Bicycle Kick	Golden Cleats	Left Footed	Blue Headband	Windy Air
Neymar Jr	Power Volley	Golden Cleats	Right Footed	Orange Headband	Muddy Grass

CLUE 1
Fractions of a number

The coach needs to count the players on the field. Only a small fraction of the twenty-four players are defenders.

Solve each problem, then write its letter in every clue box that shows the same number.

T																T
5	4	28	36	29	10	10	12	29	26	16	24	28	9	26	24	5
14	28	12	35	12	35	28	16	14	35	29	9	5	32	12	26	16

$5/8 \text{ of } 8 = \square \rightarrow \text{T}$

$5/8 \text{ of } 16 = \square \rightarrow \text{L}$

$2/6 \text{ of } 78 = \square \rightarrow \text{N}$

$2/10 \text{ of } 60 = \square \rightarrow \text{A}$

$5/6 \text{ of } 42 = \square \rightarrow \text{R}$

$1/2 \text{ of } 58 = \square \rightarrow \text{I}$

$3/6 \text{ of } 8 = \square \rightarrow \text{H}$

$4/6 \text{ of } 42 = \square \rightarrow \text{E}$

$1/6 \text{ of } 54 = \square \rightarrow \text{S}$

$1/6 \text{ of } 96 = \square \rightarrow \text{D}$

$2/8 \text{ of } 128 = \square \rightarrow \text{B}$

$4/6 \text{ of } 36 = \square \rightarrow \text{O}$

$2/8 \text{ of } 144 = \square \rightarrow \text{V}$

$1/4 \text{ of } 56 = \square \rightarrow \text{W}$

Scratch space:

CLUE 2

Order of operations

To bypass the stadium gate lock, we must calculate the scoreboard code using the strict rules of operations.

Solve each problem, then write its letter in every clue box that shows the same number.

R											R								
71	66	12	20	25	36	28	28	25	22	71	66	55	25	36	28	52	55	70	
59	25	25	20	8	22	8	55	59	31	25	11	54	22	28	25				

$53 + 6 \times 3 = \square \rightarrow \boxed{\text{R}}$

$36 + 3 \times 6 = \square \rightarrow \boxed{\text{S}}$

$21 + 5 \times 3 = \square \rightarrow \boxed{\text{F}}$

$10 + 7 \times 3 = \square \rightarrow \boxed{\text{L}}$

$10 \times 8 - 28 = \square \rightarrow \boxed{\text{U}}$

$4 + 2 \times 2 = \square \rightarrow \boxed{\text{E}}$

$7 \times 12 - 18 = \square \rightarrow \boxed{\text{I}}$

$16 + 3 \times 4 = \square \rightarrow \boxed{\text{O}}$

$9 \times 4 - 14 = \square \rightarrow \boxed{\text{P}}$

$8 + 3 \times 4 = \square \rightarrow \boxed{\text{H}}$

$5 + 2 \times 3 = \square \rightarrow \boxed{\text{Y}}$

$7 \times 12 - 14 = \square \rightarrow \boxed{\text{D}}$

$8 \times 9 - 13 = \square \rightarrow \boxed{\text{A}}$

$15 + 5 \times 2 = \square \rightarrow \boxed{\text{T}}$

$2 \times 12 - 12 = \square \rightarrow \boxed{\text{G}}$

$31 + 4 \times 6 = \square \rightarrow \boxed{\text{N}}$

Scratch space:

CLUE 3

The groundskeeper is checking the training gear. There are several equal rows of brand new soccer balls stacked together.

Solve each problem, then write its letter in every clue box that shows the same number.

24 11 56 22 132 4 7 72 72 56 50 77 30 24 11 56

63 35 50 50 22 36 15 32 132 132

$2 \times 12 = \boxed{} \rightarrow \boxed{\text{T}}$

$11 \times 1 = \boxed{} \rightarrow \boxed{\text{H}}$

$5 \times 10 = \boxed{} \rightarrow \boxed{\mathbf{D}}$

$$7 \times 1 = \boxed{} \rightarrow \boxed{7}$$

$$7 \times 11 = \boxed{} \rightarrow \boxed{0}$$

$4 \times 8 =$ $\rightarrow$ **A**

$11 \times 2 = \boxed{} \rightarrow \boxed{\text{Y}}$

$5 \times 7 = \boxed{} \rightarrow \boxed{\text{U}}$

$6 \times 6 = \boxed{} \rightarrow \boxed{\mathbf{G}}$

$8 \times 9 = \square \rightarrow \boxed{\mathbf{P}}$

$7 \times 8 = \boxed{} \rightarrow \boxed{\text{E}}$

$$3 \times 10 = \boxed{} \rightarrow \boxed{\text{N}}$$

$5 \times 3 = \boxed{} \rightarrow \boxed{\mathbf{R}}$

$11 \times 12 = \square \rightarrow \square$

$2 \times 2 = \square \rightarrow \boxed{\text{L}}$

$7 \times 9 = \square \rightarrow \boxed{\mathbf{M}}$

Scratch space:

CLUE 4 Rounding

The practice radar screen is slightly broken. It can only display the ball speed rounded to the nearest ten.

Solve each problem, then write its letter in every clue box that shows the same number.

A			A						A			A				A	
370	3700	2300	370	90	130	170	9000	170	370	2000	3000	370	90	2000	290	370	110
110	430	3700	1100	1100	170	2000	700	90	1100	9000	170	90	170	1100			

Round 367 to the nearest ten → **A**

Round 672 to the nearest hundred → **I**

Round 2,112 to the nearest thousand → **D**

Round 91 to the nearest ten → **N**

Round 432 to the nearest ten → **P**

Round 9,003 to the nearest thousand → **H**

Round 2,289 to the nearest hundred → **R**

Round 3,693 to the nearest hundred → **O**

Round 1,106 to the nearest hundred → **T**

Round 106 to the nearest ten → **S**

Round 294 to the nearest ten → **W**

Round 2,667 to the nearest thousand → **B**

Round 132 to the nearest ten → **G**

Round 170 to the nearest ten → **E**

Scratch space:

CLUE 5**Division facts (1-12) - the last clue**

We need to divide the practice cones equally among all the drill stations so every group gets a fair share.

First solve each problem. Then find each answer in the numbered list below and cross that sentence out. One sentence will be left - that is exactly what the villain did!

Step 1 - solve these:

$90 \div 10 = \boxed{}$

$15 \div 5 = \boxed{}$

$35 \div 7 = \boxed{}$

$6 \div 1 = \boxed{}$

$16 \div 8 = \boxed{}$

$14 \div 2 = \boxed{}$

$80 \div 8 = \boxed{}$

$9 \div 9 = \boxed{}$

$120 \div 10 = \boxed{}$

$110 \div 10 = \boxed{}$

$64 \div 8 = \boxed{}$

Step 2 - cross out the sentence with each answer:

1. The villain does a bicycle kick to distract the goalie, then drops neon glove fibers on the trophy stand.
2. The villain curves a corner kick over the stadium wall, then snags striped socks on the chainlink fence.
3. The villain blasts a knuckleball through the locked gate, then leaves golden cleat tracks in the corridor.
4. The villain scores a header blast into the locker room window, then drops neon glove fibers on the trophy stand.
5. The villain blasts a knuckleball through the locked gate, then snags striped socks on the chainlink fence.
6. The villain fires a power volley to break the lock, then loses a red wristband near the concession stand.
7. The villain does a bicycle kick to distract the goalie, then leaves golden cleat tracks in the corridor.
8. The villain blasts a knuckleball through the locked gate, then loses a red wristband near the concession stand.
9. The villain fires a power volley to break the lock, then leaves golden cleat tracks in the corridor.
10. The villain blasts a knuckleball through the locked gate, then scratches the floor with star shinguards.
11. The villain scores a header blast into the locker room window, then loses a red wristband near the concession stand.
12. The villain curves a corner kick over the stadium wall, then leaves golden cleat tracks in the corridor.

Answer Key

The Cup City Trophy Heist

Culprit: Enzo Fernandez

Header Blast · Neon Gloves · Right Footed · Orange Headband · Muddy Grass

Trail: Start 21 → Clue 1 16 → Clue 2 9 → Clue 3 7 → Clue 4 4 → Clue 5 1

Clue 1 (Fractions of a number): "THE VILLAIN DOES NOT WEAR A RED WRISTBAND"

$\frac{5}{8}$ of 8 = 5 (T) · $\frac{5}{8}$ of 16 = 10 (L) · $\frac{2}{6}$ of 78 = 26 (N) · $\frac{2}{10}$ of 60 = 12 (A) · $\frac{5}{6}$ of 42 = 35 (R) · $\frac{1}{2}$ of 58 = 29 (I) · $\frac{3}{6}$ of 8 = 4 (H) · $\frac{4}{6}$ of 42 = 28 (E) · $\frac{1}{6}$ of 54 = 9 (S) · $\frac{1}{6}$ of 96 = 16 (D) · $\frac{2}{8}$ of 128 = 32 (B) · $\frac{4}{6}$ of 36 = 24 (O) · $\frac{2}{8}$ of 144 = 36 (V) · $\frac{1}{4}$ of 56 = 14 (W)

Clue 2 (Order of operations): "RIGHT FOOT PRINT FOUND AT THE PENALTY SPOT"

$53 + 6 \times 3 = 71$ (R) · $36 + 3 \times 6 = 54$ (S) · $21 + 5 \times 3 = 36$ (F) · $10 + 7 \times 3 = 31$ (L) · $10 \times 8 - 28 = 52$ (U) · $4 + 2 \times 2 = 8$ (E) · $7 \times 12 - 18 = 66$ (I) · $16 + 3 \times 4 = 28$ (O) · $9 \times 4 - 14 = 22$ (P) · $8 + 3 \times 4 = 20$ (H) · $5 + 2 \times 3 = 11$ (Y) · $7 \times 12 - 14 = 70$ (D) · $8 \times 9 - 13 = 59$ (A) · $15 + 5 \times 2 = 25$ (T) · $2 \times 12 - 12 = 12$ (G) · $31 + 4 \times 6 = 55$ (N)

Clue 3 (Multiplication facts (1-12)): "THEY SLIPPED ON THE MUDDY GRASS"

$2 \times 12 = 24$ (T) · $11 \times 1 = 11$ (H) · $5 \times 10 = 50$ (D) · $7 \times 1 = 7$ (I) · $7 \times 11 = 77$ (O) · $4 \times 8 = 32$ (A) · $11 \times 2 = 22$ (Y) · $5 \times 7 = 35$ (U) · $6 \times 6 = 36$ (G) · $8 \times 9 = 72$ (P) · $7 \times 8 = 56$ (E) · $3 \times 10 = 30$ (N) · $5 \times 3 = 15$ (R) · $11 \times 12 = 132$ (S) · $2 \times 2 = 4$ (L) · $7 \times 9 = 63$ (M)

Clue 4 (Rounding): "A ORANGE HEADBAND WAS SPOTTED IN THE NET"

Round 367 to the nearest ten = 370 (A) · Round 672 to the nearest hundred = 700 (I) · Round 2,112 to the nearest thousand = 2000 (D) · Round 91 to the nearest ten = 90 (N) · Round 432 to the nearest ten = 430 (P) · Round 9,003 to the nearest thousand = 9000 (H) · Round 2,289 to the nearest hundred = 2300 (R) · Round 3,693 to the nearest hundred = 3700 (O) · Round 1,106 to the nearest hundred = 1100 (T) · Round 106 to the nearest ten = 110 (S) · Round 294 to the nearest ten = 290 (W) · Round 2,667 to the nearest thousand = 3000 (B) · Round 132 to the nearest ten = 130 (G) · Round 170 to the nearest ten = 170 (E)

Clue 5 (Division facts (1-12)): surviving statement is box 4 → Enzo Fernandez

$90 \div 10 = 9$ · $15 \div 5 = 3$ · $35 \div 7 = 5$ · $6 \div 1 = 6$ · $16 \div 8 = 2$ · $14 \div 2 = 7$ · $80 \div 8 = 10$ · $9 \div 9 = 1$ · $120 \div 10 = 12$ · $110 \div 10 = 11$ · $64 \div 8 = 8$